

AWS CLOUD

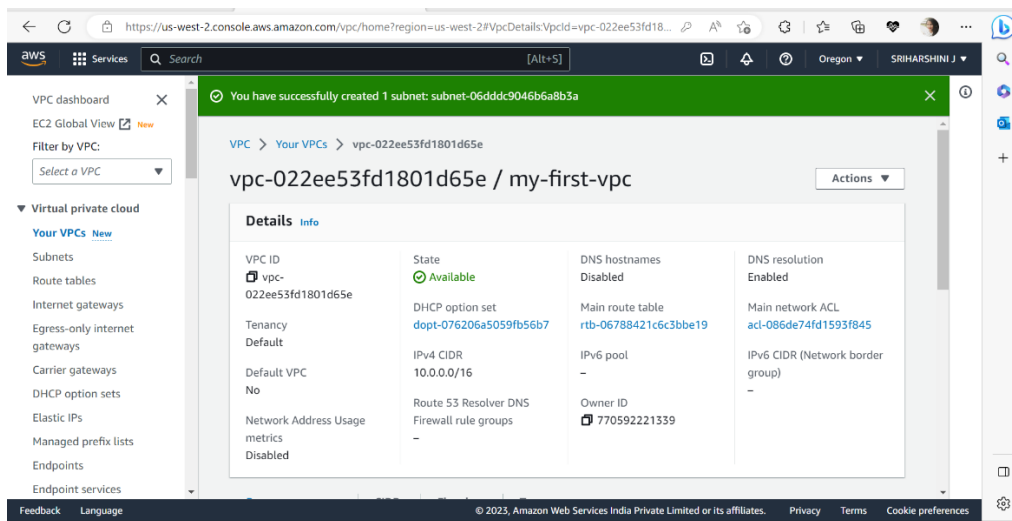
by : Sriharshini J

Q1. Create a virtual network with 2 subnets. Each subnet should have 16 Ips only.

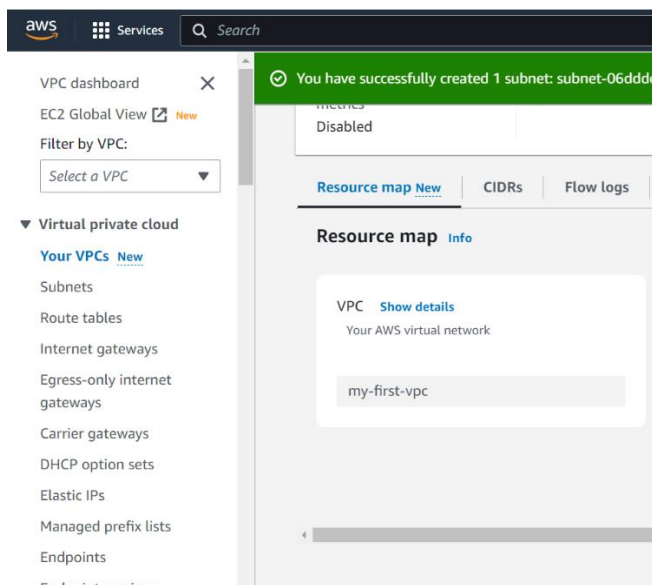
To create a VPC, subnets, and other VPC resources using the console

1. Open the Amazon VPC console at <https://console.aws.amazon.com/vpc/>.
2. On the VPC dashboard, choose Create VPC.
3. For Resources to create, choose VPC and more.
4. Keep Name tag auto-generation selected to create Name tags for the VPC resources, or clear it to provide your own Name tags for the VPC resources.
5. For IPv4 CIDR block, enter an IPv4 address range for the VPC. A VPC must have an IPv4 address range.
6. Choose a Tenancy option.
7. For Number of Availability Zones (AZs), To choose the AZs for subnets, expand Customize AZs. Otherwise, let AWS choose .
8. To configure subnets, choose values for Number of public subnets and Number of private subnets. To choose the IP address ranges for your subnets, expand Customize subnets CIDR blocks.
9. gateways. In production, deploy a NAT gateway in each AZ with resources that need access to the public internet.
10. For DNS options, both options for domain name resolution are enabled by default.
11. To add a tag to your VPC, expand Additional tags, choose Add new tag, and enter a tag key and a tag value.
12. In the Preview pane, you can visualize the relationships between the VPC resources that you've configured. Solid lines represent relationships between resources. Dotted lines represent network traffic to NAT gateways, internet gateways, and gateway endpoints. After you create the VPC, you can visualize the resources in your VPC in this format at any time using the Resource map tab.
13. When you are finished configuring your VPC, choose Create VPC.

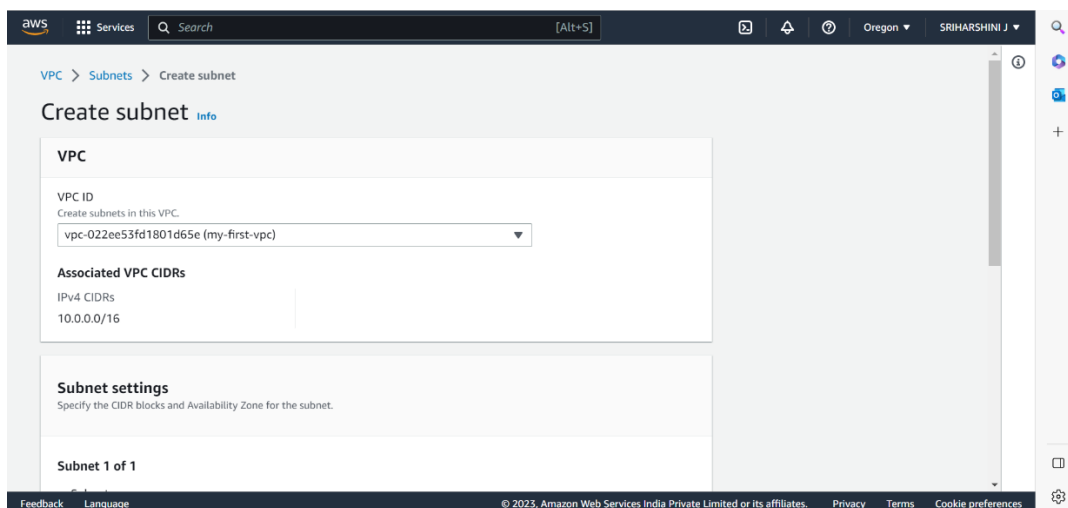
Snapshot: 1



Snapshot : 2



Snapshot : 3



Snapshot : 4

The screenshot shows the AWS Management Console interface. On the left, the 'Virtual private cloud' menu is expanded, showing options like 'Your VPCs', 'Subnets', 'Route tables', etc. The main panel displays the 'Subnets (2)' page for a VPC with ID 'vpc-022ee53fd1801d65e'. A search filter is applied: 'search: vpc-022ee53fd1801d65e'. The table lists two subnets:

	Name	Subnet ID	State	VPC	IPv4
<input type="checkbox"/>	public-subnet-2b	subnet-06dddc9046b6a8b3a	Available	vpc-022ee53fd1801d65e my...	10.0.0.0/24
<input type="checkbox"/>	public-subnet-2a	subnet-00ecfec3981f59b9	Available	vpc-022ee53fd1801d65e my...	10.0.0.0/24

At the bottom, there is a 'Select a subnet' section with icons for different actions.

Snapshot : 5

The screenshot shows the 'Create Subnet' wizard in the AWS Management Console. The 'Subnet 1 of 1' page is displayed. The 'Subnet name' field contains 'my-subnet-01'. The 'Availability Zone' is set to 'No preference'. The 'IPv4 CIDR block' is set to '10.0.0.0/24'. There are no tags associated with the resource. At the bottom, there are buttons for 'Add new tag', 'Remove', and 'Add new subnet'.

Snapshot : 6

The screenshot shows the 'Resource map' for a VPC in the AWS Management Console. A green notification banner at the top states: 'You have successfully created 1 subnet: subnet-06dddc9046b6a8b3a'. The 'Resource map' shows the VPC structure with subnets and route tables. The subnets listed are 'public-subnet-2b' and 'public-subnet-2a'. The route table listed is 'rtb-06788421c6c3bbe19'. The network connections are also shown.

Q4 Create a Lambda that should trigger as soon as you upload a file in the S3 bucket.

The function should be able to print the name of the file uploaded in the function.

S3 Bucket creating

Step 1: Log on to [AWS Console](#).

Step 2: In the search bar located at the top of your AWS Management Console, type “Amazon S3”.

Step 3: Click on “S3 – Scalable Storage in the Cloud” and proceed further.

Step 4: Click on “Create Bucket”. A new pane will open up, where you have to enter the details and configure your bucket.

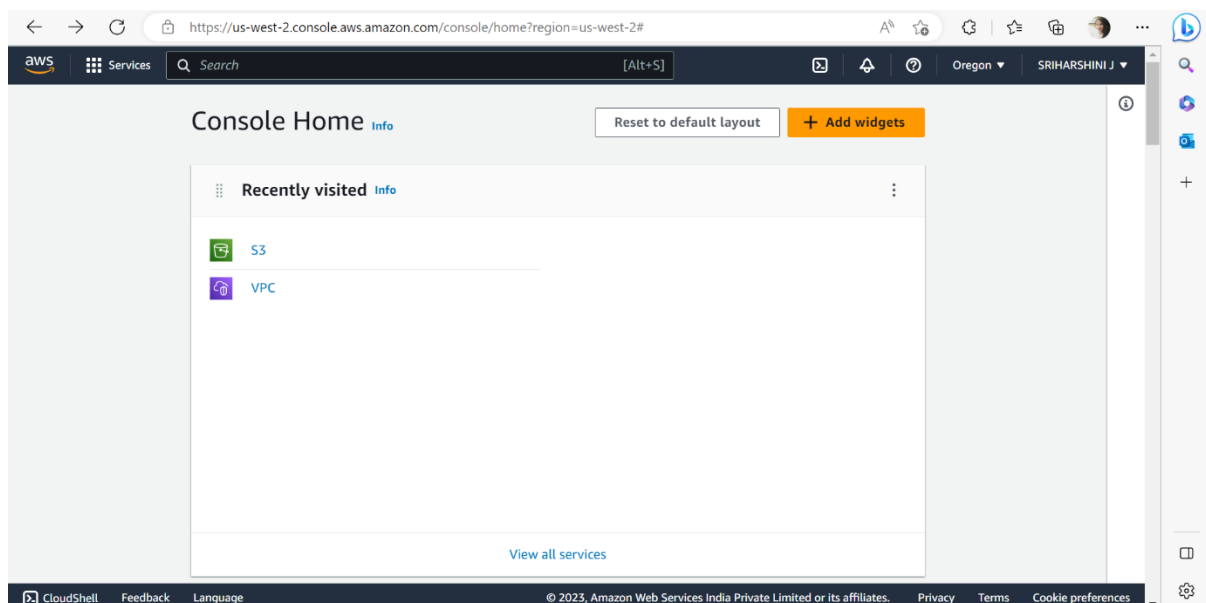
Step 5: Enter the name of your bucket.

Step 6: Next, choose an AWS region nearest to your location or where you want your data to reside.

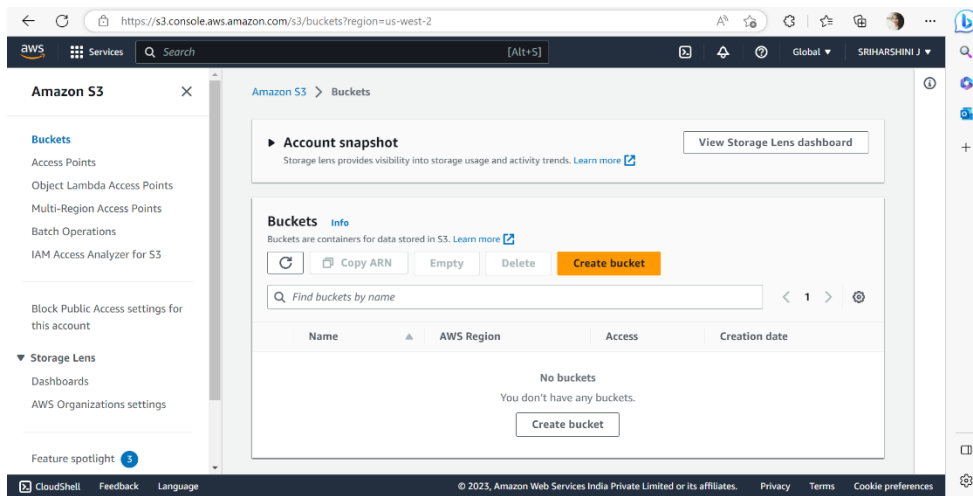
Step 7: Click on Create Bucket.

If the bucket is created successfully, you will see a message on the top of the page:

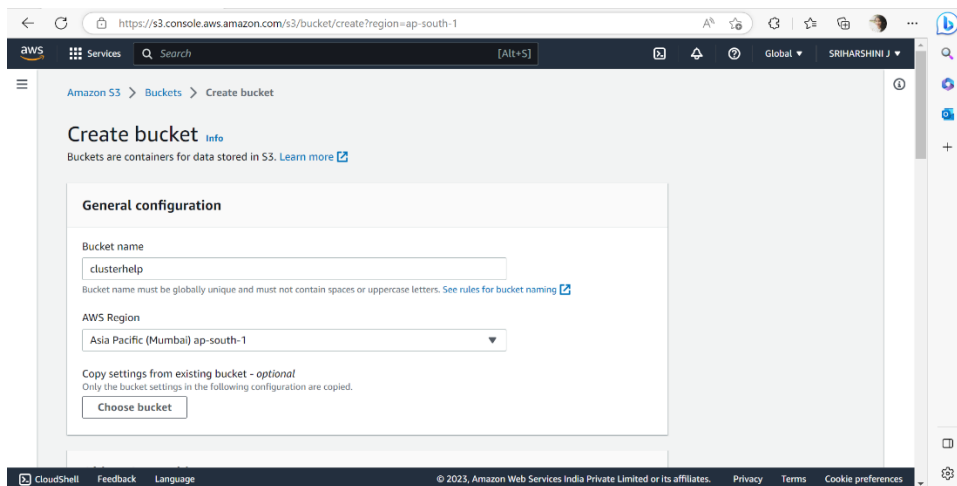
Snapshot: 1



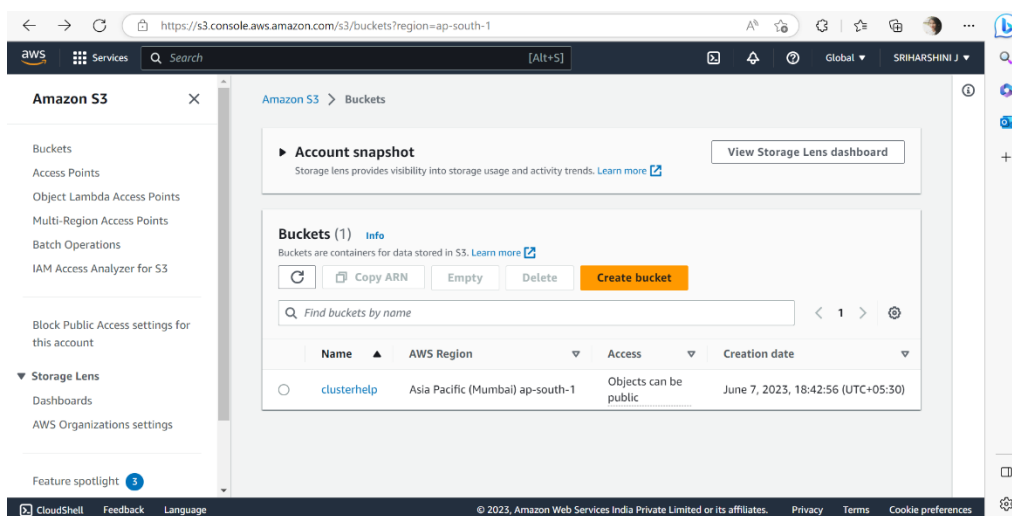
Snapshot:2



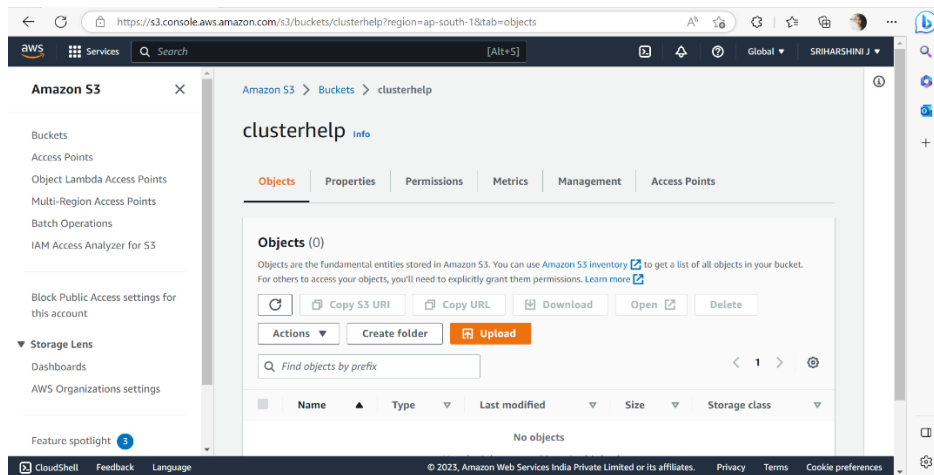
Snapshot:3



Snapshot:4



Snapshot:5



CREATING LAMBDA FUNCTION

To create the Lambda function

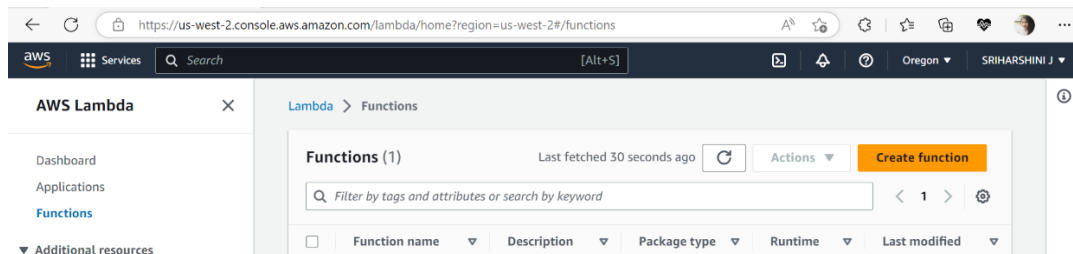
1. Open the [Functions](#) page of the Lambda console.
2. Make sure you're working in the same AWS Region you created your Amazon S3 bucket in.
3. Choose Create function.
4. Choose Author from scratch
5. Under Basic information, do the following:
 1. For Function name, enter s3-trigger-tutorial
 2. For Runtime, choose Node.js 18.x.
 3. For Architecture, choose x86_64.
6. In the Change default execution role tab, do the following:
 1. Expand the tab, then choose Use an existing role.
 2. Select the lambda-s3-trigger-role you created earlier.
7. Choose Create function.

To deploy the function code

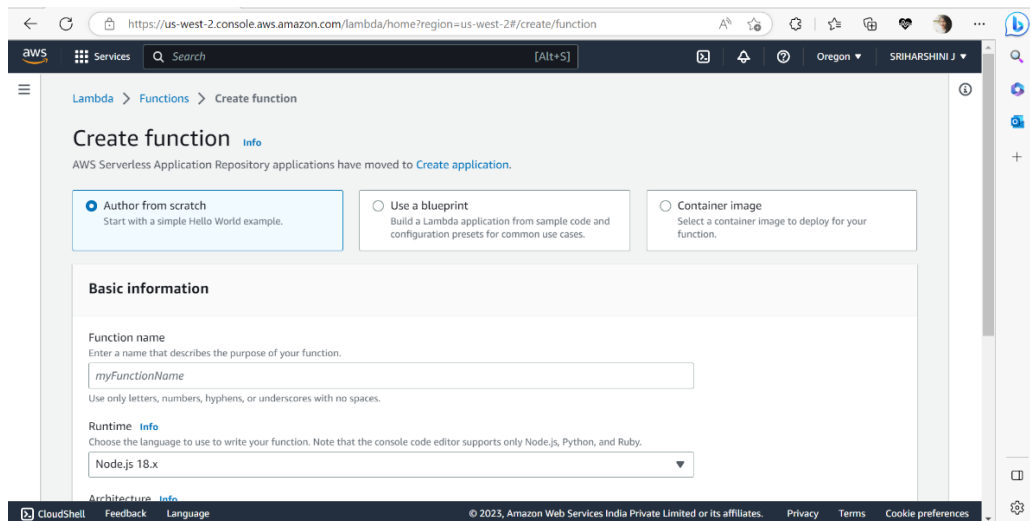
1. Open the [Functions](#) page of the Lambda console.
2. Choose the function you created in the previous step
3. Choose the Code tab.

4. paste JavaScript code into the index.mjs tab in the Code source pane. Make sure to replace the region in the code with the AWS Region you created your bucket in.
5. Choose Deploy.

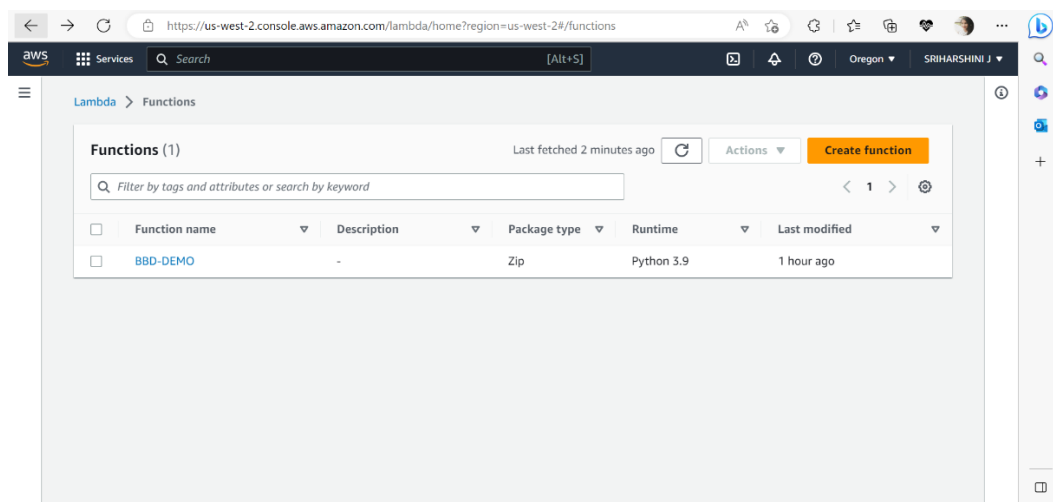
SNAPSHOT: 1

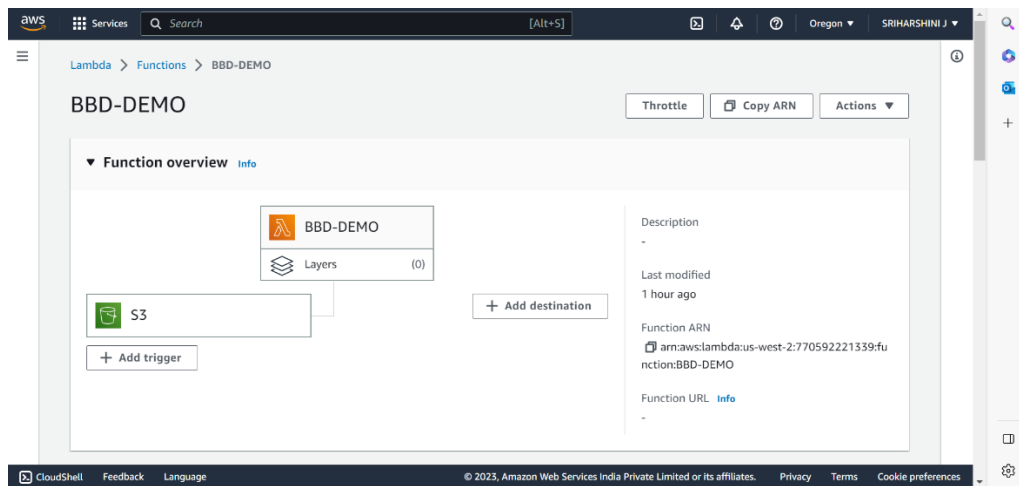


SNAPSHOT:2



SNAPSHOT:3



SNAPSHOT:4

To create the Amazon S3 trigger

1. In the Function overview pane of your function's console page, choose Add trigger.
2. Select S3.
3. Under Bucket, select the bucket you created earlier in the tutorial.
4. Under Event types, select All object create events. You can also configure a trigger to invoke Lambda when an object is deleted
5. Under Recursive invocation, select the check box to acknowledge that using the same Amazon S3 bucket for input and output is not recommended.
6. Choose Add.

To upload an object to your Amazon S3 bucket

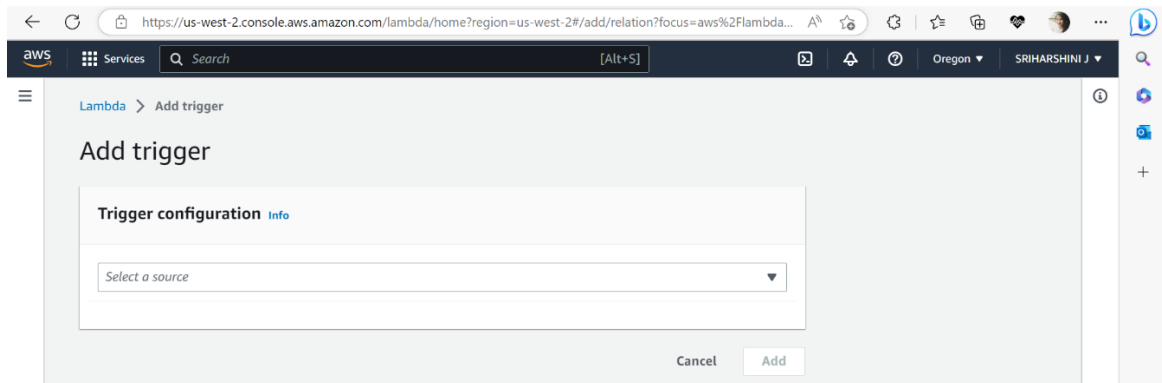
1. Open the Buckets page of the Amazon S3 console and choose the bucket you created earlier.
2. Choose Upload.
3. Choose Add files and use the file selector to choose an object you want to upload. This object can be any file you choose.
4. Choose Open, then choose Upload.

To verify correct operation using CloudWatch Logs

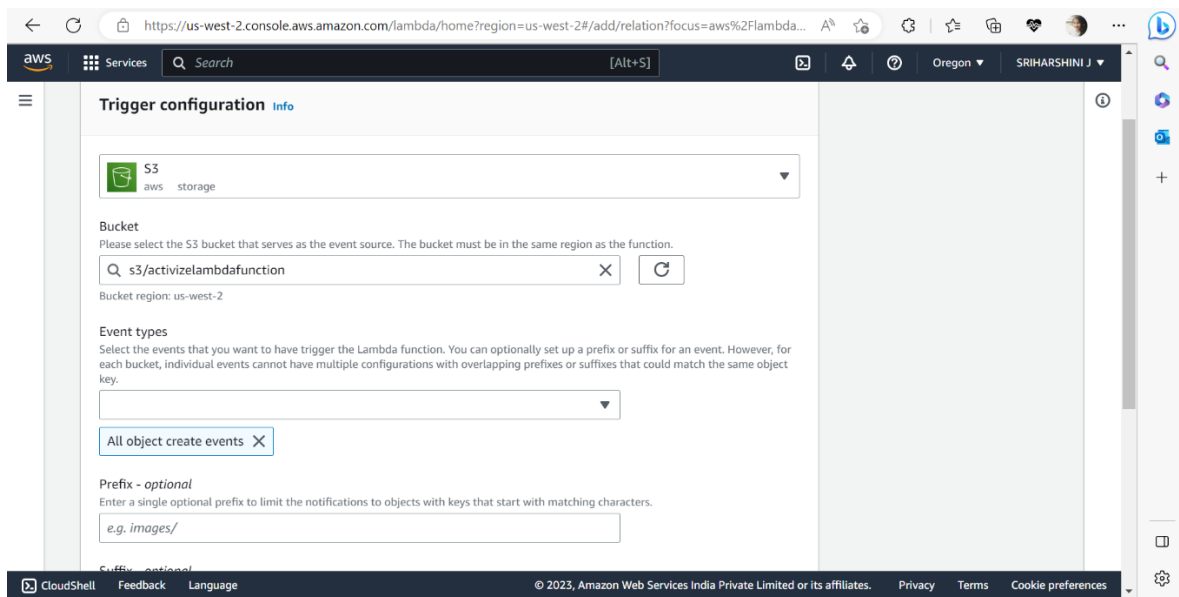
1. Open the CloudWatch console.

2. Make sure you're working in the same AWS Region you created your Lambda function in. You can change your Region using the drop-down list at the top of
3. Choose Logs, then choose Log groups
4. See final result

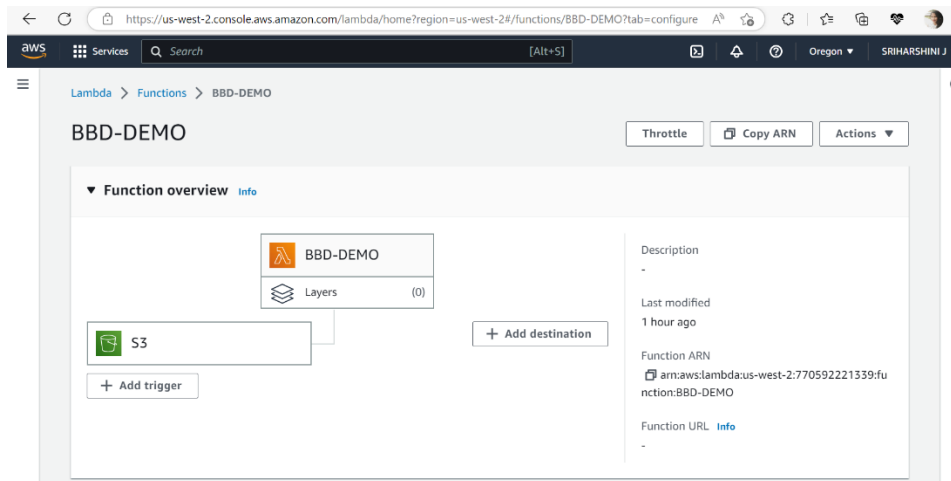
SNAPSHOT : 1



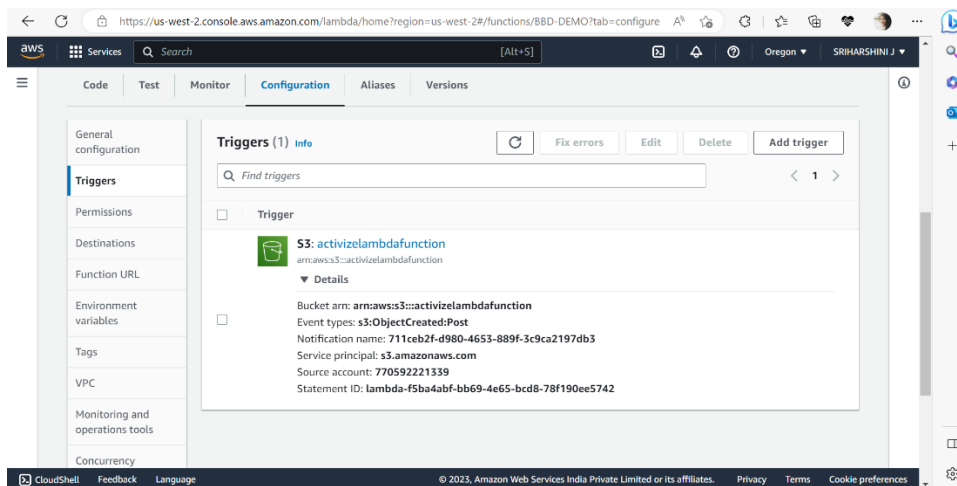
SNAPSHOT :2



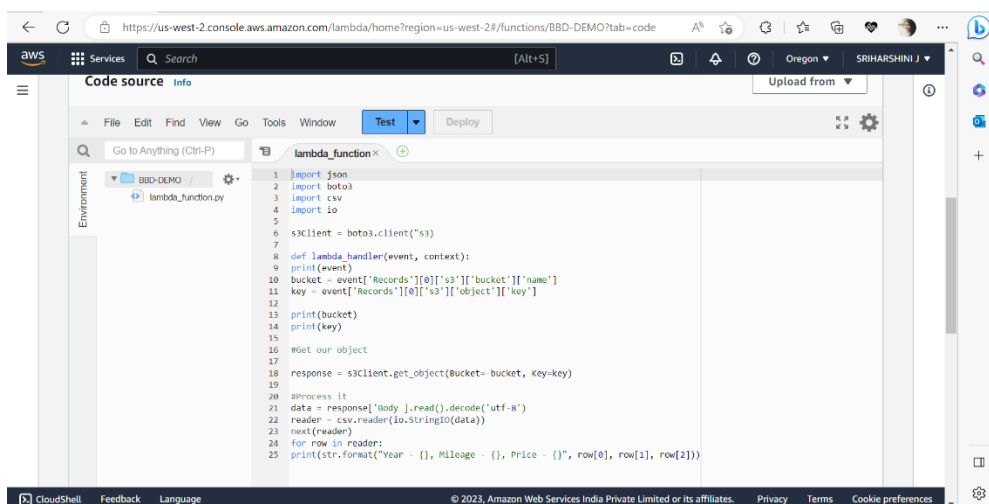
SNAPSHOT :3



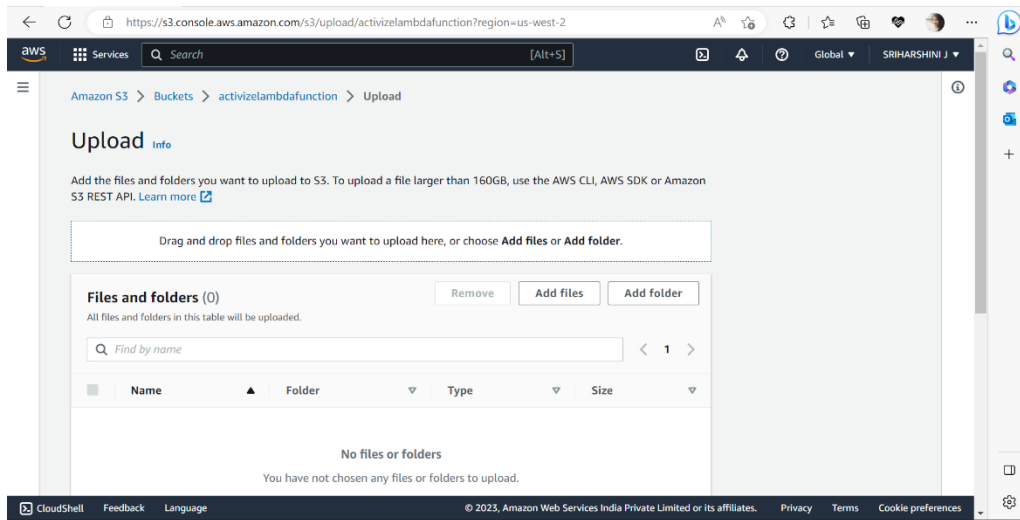
SNAPSHOT :4



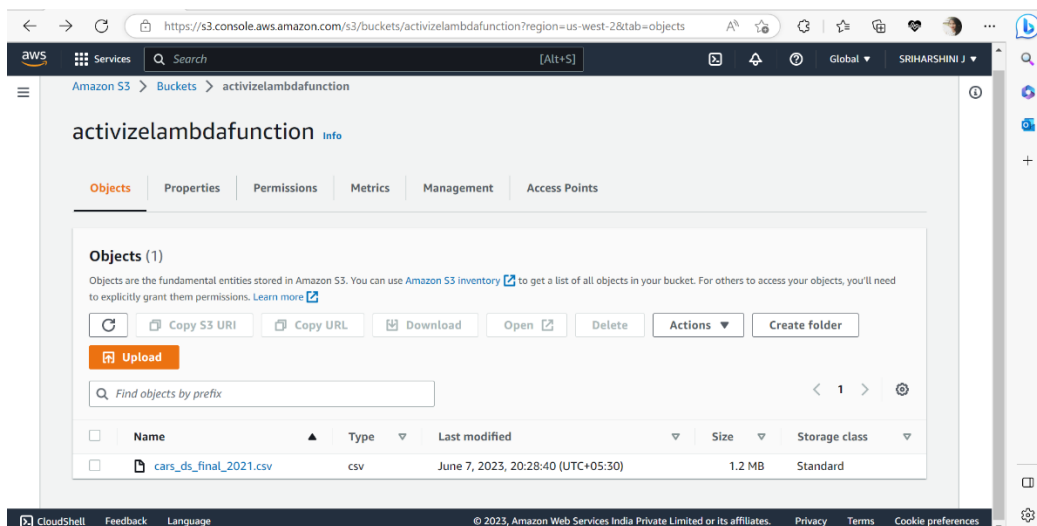
SNAPSHOT :5



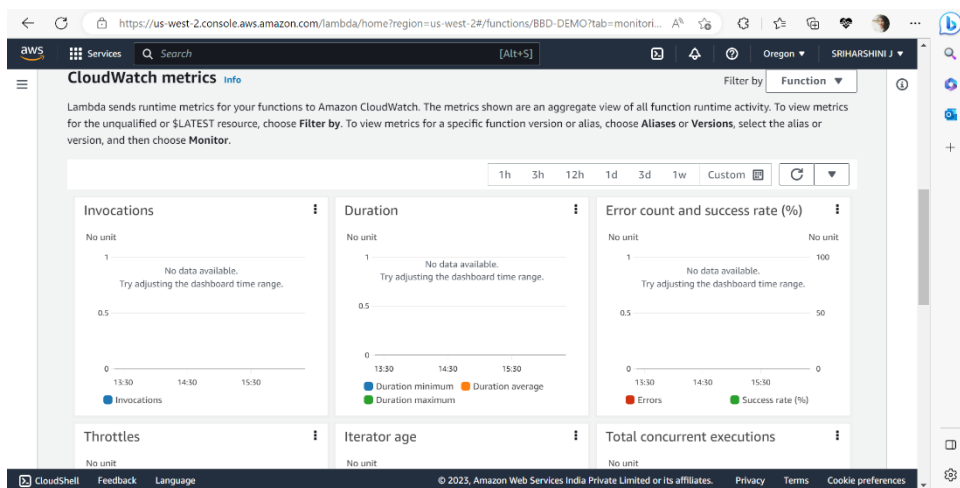
SNAPSHOT :6



SNAPSHOT :7



SNAPSHOT :8



SNAPSHOT :9

START RequestId: 634e57ac-356b-4d99-a0fb-dea04b8a33e7 Version: \$LATEST
bbd-s3-trigger-demo
vehicles.csv
Year - 1998, Mileage - 27, Price - 9991
Year - 1997, Mileage - 17, Price - 9925
Year - 1998, Mileage - 28, Price - 10491
Year - 1998, Mileage - 5, Price - 10990
Year - 1997, Mileage - 38, Price - 9493
Year - 1997, Mileage - 36, Price - 9991
Year - 1997, Mileage - 24, Price - 10490
Year - 1997, Mileage - 37, Price - 9491
Year - 1997, Mileage - 38, Price - 9491
Year - 1997, Mileage - 30, Price - 9990
Year - 1997, Mileage - 38, Price - 9491
Year - 1997, Mileage - 25, Price - 9990
Year - 1997, Mileage - 39, Price - 9990
Year - 1997, Mileage - 22, Price - 9390
Year - 1997, Mileage - 24, Price - 9990
Year - 1997, Mileage - 37, Price - 9990
Year - 1997, Mileage - 29, Price - 9990
Year - 1997, Mileage - 70, Price - 8990
Year - 1996, Mileage - 29, Price - 7990
Year - 1995, Mileage - 72, Price - 5994
Year - 1993, Mileage - 72, Price - 5994
Year - 1994, Mileage - 61, Price - 5500
Year - 1998, Mileage - 7, Price - 11000